

Application No: 09/507,336  
Office action mailed October 29, 2009  
Response and Amendment dated January 29, 2009

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-33. (Canceled)

34. (Previously presented) A method of delivering energy to ablate tissue, comprising the steps of:

providing a device having an ablating element;

positioning the device at an epicardial tissue site, the tissue site having an epicardial near surface and an endocardial far surface;

heating or cooling the tissue site with a first, non-ablating quantity of energy delivered over a first period of time;

measuring a temperature change at the tissue site over the first period of time;

analyzing the temperature change over the first period of time to determine a temperature response of tissue at the tissue site;

characterizing the tissue based on the temperature response of the tissue, temperature responses of other known tissue types and the input of at least one variable from a list of variables consisting of presence of fat, amount of fat, flow rate of blood, tissue thickness and temperature of blood;

determining an ablation time interval and a desired temperature to be delivered by the ablating element based on the tissue characterization;

activating the ablating element after the determining step is completed; and

ablating the tissue with a second quantity of energy delivered over a second period of time as directed by the determining step.

Application No: 09/507,336  
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35. (Previously presented) The method of claim 34, wherein:  
the analyzing and ablating steps are controlled by a control system; and  
the ablating step is carried out by maintaining the epicardial near surface  
temperature at a temperature of 0-80°C during the ablating step.

36-37. (Canceled)

38. (Original) The method of claim 34, wherein:  
the ablating step is carried out using the results of the measuring step to  
approximate when the far surface achieves a target temperature.

39. (Canceled)

40. (Currently amended) The method of claim 34, wherein:  
the device comprises a plurality of ablating elements, and wherein the ablating  
step is carried out with a plurality of ablating elements, wherein no more than 50% of  
the ablating elements are activated at one time.

41. (Currently amended) The method of claim 34, wherein:  
the providing step is carried out with the device having comprises a plurality of  
ablating elements and a plurality of suction wells, and wherein at least one of the  
ablating elements being is positioned in each of the suction wells.

42-73. (Canceled)

74. (Currently amended) A method of delivering energy to ablate tissue, comprising  
the steps of:

providing a device having an ablating element;

positioning the device at an epicardial tissue site, the tissue site having an  
epicardial near surface and an endocardial far surface;

applying a first, non-ablating quantity of energy to the tissue site;

measuring a temperature change at the tissue site over a first period of time;

analyzing the temperature change to determine a tissue characterization;

activating the ablating element after the determining analyzing step is completed;

and

ablating tissue at the tissue site with a second quantity of energy over a second period of time; and wherein the ablating step being is carried out with input from at least one variable from a list of variables consisting of presence of fat, amount of fat, flow rate of blood, tissue thickness and temperature of blood.

75. (Currently amended) The method of claim 74, wherein:

the analyzing and ablating steps are controlled by a control system; and

the ablating step being is carried out by maintaining the epicardial near surface temperature at a temperature of 0-80°C during the ablating step.

76. (Canceled)

77. (Previously Presented) The method of claim 74, wherein:

the ablating step is carried out using the results of the measuring step to approximate when the far surface achieves a target temperature.

78. (Currently amended) The method of claim 74, wherein:

the device comprises a plurality of ablating elements, and wherein the ablating step is carried out with a plurality of ablating elements, wherein no more than 50% of the ablating elements are activated at one time.

79. (Currently amended) The method of claim 74, wherein:

Application No: 09/507,336

Office action mailed October 29, 2009

Response and Amendment dated January 29, 2009

the providing step is carried out with the device comprises having a plurality of ablating elements and a plurality of suction wells, and wherein at least one of the ablating elements being is positioned in each of the suction wells.

80. (Previously presented) The method of claim 34, wherein, the first, non-ablating quantity of energy is cooling energy.

81. (Previously presented) The method of claim 74, wherein, the first, non-ablating quantity of energy is cooling energy.